EFFECTIVENESS OF EARLY SUCKLING ON THIRD STAGE OF LABOUR IN PARTURIENT WOMEN AT SELECTED HOSPITALS, SALEM.

By

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ABSTRACT

A study was conducted to evaluate the effectiveness of early suckling on third stage of labour in parturient women at selected hospitals, Salem.

An evaluative approach with quasi experimental post test only control group design was used to measure the effectiveness of early suckling. Convenient sampling technique was used to select the sample of 60 parturient women among them 30 in experimental and 30 in control group were selected from Sri Gokulam Hospital and Vijaya Hospital, Salem respectively. The data was collected by using structured observation record on third stage of labour. In experimental group 24(80%)of them had 8-10 minutes total duration of third stage of labour whereas in control group 10(33.33%) of them had 8-10 minutes,14(46.67%) of them had 11-13 minutes. In experimental group the mean value was 9.23± 1.79, mean percentage was 73.93%. difference in mean percentage between the experimental and control group on total duration of third stage of labour was 16.25% and obtained 't' value 5.29 shows significance at $p<0.05$ level. In experimental group 23(76.67%) of them had 100-150 ml of total blood loss, whereas in control group 12(43.33%) had 151-200 ml. The mean value was 136.50 ±33.27.mean percentage was 14.50% and obtained 't' value 4.85 shows significance at $p<0.05$ level. This reveals that early suckling was effective in reducing the total duration of third sta ge of labour and total blood loss. There was no significant association found on total duration of third stage of labour and total blood loss among parturient women in experimental and control group with their selected demographic variables.

CHAPTER I

INTRODUCTION

"Breast feeding is the women's right

and to be breast fed is a baby's right "

- Charles. M., (2000)

Women in child bearing age and growing infants and children together form around 59% of our society . They are more dependent and vulnerable members of the society. They are at high risk of morbidity and mortality.

World Health Organization (WHO), United Nations Population Fund (UNFPA), the United Nations Children Emergency Fund (UNICEF), The World Bank reported about maternal mortality that "The number of women dying due to complication during pregnancy and child birth has decreased by 34% from an estimated 5,46,000 in 1990 to 3,58,000 in 2008". But it is less than half of what is needed to achieve Millennium Development Goals (MDG) target for reducing maternal deaths by 75% between 1990 and 2015.

Two third of maternal death in 11 developing countries, in India heading the list with 63,000. Maternal mortality rate as well as the infant mortality rate both can be reduced effectively with the management of early suckling and adequate breast feeding.

According to UNFPA, WHO report the pregnant women still die from four major causes, that are severe bleeding after child birth, infection, hypertensive disorders and unsafe abortion.

As per sample registration system (SRS, 2008) the infant mortality rate for India has been 53 per thousand live births in 2008.At the beginning of millennium year 2000, 189 countries and 23 international health agencies had pledged to reduce

child under five mortality by two-third and maternal mortality by three-fourth by the year 2015. These were called Millennium Development Goals (MDGs) number 4 and 5. **(Decade Report, 2000-2010)**

Labor is a natural process, there are four stages of labour. Inthat third stage of labour is very crucial period in the women's life. Complications are more expected during third stage of labour.

The third stage labor begins upon completion of the birth of the baby and ends with the birth of the placenta. It is known as placental stage of labour. **(Annamma Jacob, 2005)**

In third stage the mother face many problems such as postpartum hemorrharge, retained placenta, inversion of the uterus. This may lead to increased mortality and morbidity rate. These problems can be prevented by breast feeding especially early suckling. In women it plays an important function like, it promotes bonding between mother and baby, involution of the uterus to normal size, it act as natural contraceptives and reduces the risk of primary postpartum hemorrhage. (**Bonnar John, 2000)**

The equivalent of breast milk is yet to be innovated by a scientific community despite tremendous advances in science and technology. Breast feeding has the slogan "Breast milk is the first milk and saves one billion lives." Babies need appropriate nutrition, affection, stimulation, and protection against infection .Breast feeding meets these needs and given them the best start of life. (**Nanthini Subbaiah, 2003)**

Children are our future, and our most precious resource. Mother' milk is the first and the most precious gift to her offspring. Human breast milk provides complete nutrition for infants and helps to protect against certain childhood diseases. It provides

nutritional, immunological, developmental, psychological, social benefits for infants and keeps in healthy.

In "our healthier nation" action report the government has highlighted the promotion of breast feeding in order to assist improvement in health and to reduce the health inequalities of mother and children.**(Health Technology Assessment 2000)**

Practice of breast feeding has become a worldwide health goal for all Nation because of many unique components found only in human milk.Breast feeding alone reduce infant mortality rates by 13% it is not only the best food for the child but also ensures a strong foundation for good health throughout life. **(WHO&UNICEF)**

Health care professionals have an important role to play in promoting and practicing early suckling in management of third stage of labour, and prevention of infant mortality rate and maternal mortality rate.

In **Millennium Development Goals (2008) &WHO** stated that there have been improvements in early suckling and also exclusive breast feeding to reduce the infant mortality rate.

Need for the Study

"Breast feeding has justifiably called the gold standard for infant"

WABA/WHO/ UNICEF

Suckling and Nursing are synonyms for breast feeding. It is the feeding of an infant or young child with breast milk directly from female human breast.

Breast milk is the Cindrella substance of the decade" and it is natural, most precious gift to the new born. Breast milk is the ideal food for the infant because it is safe, clear, hygienic, cheap and available to the infant at correct temperature.

It also contains antimicrobial factors there by it protects the infants from infections and diseases. **(K.Park. 2001)**

Breast feeding is a right for every mother and it is essential to fulfill every child's right to adequate food and the highest attainable standard of health. **[WABA, 2000]**

Babies have a suckling reflex that enables them to suck and swallow milk. The World Health Organization (WHO) and the American Academy of Pediatrics (AAP) emphasizes the value of breast feeding for mothers as well as children. Both recommends exclusive breast feeding for the first six months of life and then supplemented breast feeding for atleast one year and upto two years or more (2009, 2010).

Nipple stimulation by immediate suckling after delivery to aid uterine contraction has been practiced for many years and may be used either in addition to various components of active management or as part of expectant management. Stimulating nipple, in this way of early suckling may increase the release of oxytocin which may stimulate of uterine contractions, encouraging placental separation, and reducing postpartum haemorrhage, shortening the duration of third stage labour. **(K.Douglas Salzmannik)**

The importance of early suckling in active versus expectant management of third stage of labour and implementation protocol was early suckling facilitates release of endogenous oxytocin and aids in the promotion of bonding. The let down reflex is elicited through infant suckling that stimulates sensory nerve endings in the nipple. These impulses travel via afferent neural path ways in the spinal cord to the hypothalamus, stimulating oxytocin release from the posterior pituitary gland.

Oxytocin allows for milk ejection and uterine contractions that help to maintain uterine tone. **(Carol Burke, 2010)**

In 2003, the International Federation of Gynecology and Obstetrics (FIGO) and the International Confederation Midwives (ICM) issued a joint statement that has prioritized universal access to active management of third stage labour (AMTSL) to respond to the urgent need to make real progress in reducing maternal mortality globally. In that protocol or tool kit, they give important for early suckling at the breast is initiated. Which generally takes place between 10 and 45 minutes postpartum period depending on the baby. It reduces the duration of third stage of labour and blood loss, and risk of retained placenta.

The frequency of haemorrahage increased between 10-40 mts after the birth of the baby. An oxytocin agent is usually not recommended unless uterine tone is poor, encouraging the mother to feed the baby as soon as after delivery of the baby may enhance these physiological changes. This is the result of the sucking reflex releases oxytocin from the posterior lobe of the pituitary gland which helps to secure good uterine action. Early suckling is the physiological management of 3rd stage labour. **(Bennet, V. Ruth, et.al., 2002)**

The early suckling establishing deeply rooted maternal bonds in all mammals. Suckling triggers mechanisms that reduce crying, thereby conserving energy. Infants also form affectional bonds with their mothers, in part through nursing-suckling interactions, may of which are also opioid mediated. **(E. Blass, 2008)**

Suckling research may illuminate studies on learning and memory. Their findings show that there is powerful learning mechanism behind suckling along with providing insight into suckling in infants including in human babies the work may

help illuminate basic learning, memory and reinforcement mechanisms in the brain. **(Beth, Azar, 2000)**

Breast milk is the prepared form of nourishment for an infant although it may not always be feasible to provide. The immediate health benefits of breast feeding are well established providing protection against infectious disease morbidity and mortality in early life and lower the cardiometabolic risk and cardiovascular outcome in adulthood. **(Christoper.G Owen, 2010)**

WHO, (2001) approves that there is also an association between earlier suckling and longer breast feeding duration. They found that in addition to suckling at the breast immediately or soon after birth helps the womb to contract the uterus and helps to prevent severe bleeding. The infants rooting and suckling reflexes are strong immediately after delivery and encouraging skin to skin contact between mother and infant. Immediately after birth putting the baby to the breast will help to strengthen initial mother child bonding and stimulates the release of oxytocin which facilitates the uterine contraction and complete expulsion of the placenta and membranes during 3rd stage of labour.

A prospective observational study in Gadchiroli India conducted by **Abhay Bang,** the result was about women in third stage labour complications. Following home deliveries admitted as emergencies to a referral hospital are discussed. Retained placenta constituted 68% of emergencies, primary and secondary postpartum haemorrhage was seen in 16.4% and 15.6% respectively. There was a considerable delay in referral and 31.4% patients were admitted in shock. 2 patients required prolonged hospitalization. Training of traditional birth attendants in management of the third stage of labour will reduce these complications in the developing countries.

Where approximately 80% of all births are managed by untrained personnel who conduct deliveries at home.

The suckling reflex of the newborn has been found to be strongest after birth. If the infant is not fed, the reflex diminishes rapidly to reappear only 40 hours later. **(Arachaksy, 2000)**

There have been improvement in early and exclusive breast feeding, measles immunization, Vitamin A supplementation to reduce the infant mortality rate. **(Veneman. M)**

UNICEF, (2007) report states that India has close to 2.5 million children born every year out of these 1.9 million are under 5 children, who die in a year. Only 23.4% newborns across the country begin breast feeding within an hour of birth. This rate has to be improved upto 90% or more inorder to achieve millennium development goals and to fight malnutrition and child death in India. Early initiation of breast feeding practice provides quality health care for children and reduces their specific health problems.

Infants Mortality Rate (IMR) is regarded as an important and sensitive indicator of the health status of a community. It also reflects the general standard of living of the people and effectiveness of interventions for improving maternal and child health in a country. IMR is still in the unacceptable range and a lot needs to be done. IMR in Tamilnadu <50. But we also have high IMR states like UttarPradesh [83/1000]As about 50% of the infant deaths occur within the neonatal period. Services for the infants that promote timely and adequate immunization, adequate breast feeding need to be strengthened. **(Bir Singh, 2006)**

In regard to maternal mortality and morbidity statistic al data received from the various information media and considering the above factors and from the personal experience of obstetrics unit, the investigator felt the importance of early suckling. Which can facilitates maternal as well as fetal well being. It is an economic, feasible life saving expectant management in third stage of labour. Hence the present study undertaken to evaluate the effectiveness of early suckling on third stage of labour.

Statement of the Problem

A Study to Evaluate the Effectiveness of Early Suckling on Third Stage of Labour in Parturient Women at Selected Hospitals, Salem.

Objectives

1. To evaluate the effectiveness of early suckling on third stage of labour among parturient women in experimental and control group.
2. To associate the third stage of labour among parturient women in experimental and control group with their selected demographic variables

Operational Definitions

1. Effectiveness:

It refers to statistically significant difference in terms of third stage of labour and total blood loss between the experimental and control group.

2. Early suckling:

Baby is placed on mother's breast immediately after birth and suckling is initiated before expulsion of placenta.

3. Third stage of labour:

It is the time period from the birth of the baby to expulsion of placenta and its membrane.

4. Parturient women:

The women who is in the process of giving child birth.

Assumption

1. Early suckling has some effect on third stage of labour.
2. Early suckling may reduce the total duration of third stage of labour and blood loss.

Hypotheses

H_1: There will be a significant difference on third stage of labour among parturient women in experimental and control group at $p< 0.05$ level.

H_2: There will be a significant association on third stage of labour among parturient women in experimental and control group with their selected demographic variables at $p<0.05$ level.

Delimitations

The study is delimited to,

1. 60 samples only
2. selected settings only.
3. assessing only third stage of labour.

Projected Outcome

Physiological management of early suckling will reduce the total duration third stage of labour and blood loss.

Conceptual Frame Work

Conceptual framework provides a certain frame for clinical practice, research and education. It gives direction and guidance for structuring research. **(Kozier, 1995)**

Conceptual framework are a type of intermediate theory that have the potential to connects all aspects of enquiry, e.g., conceptual framework acts like maps that give

coherence empirical enquiry. Because conceptual framework are potential close to empirical enquiry. They take different forms depending upon the research question or problem. **(Shields and Tafalli, 2006)**

The present study is based on the concept of early suckling on women who are in third stage of labour, to change the duration of third stage of labour and blood loss.

The investigator adopted the Kristen M.Swans Theory of Caring (1993). Swanson states that caring is a nurturing way of relating to a valued other towards the postnatal mother feels a personnel sense of commitment and responsibility by the midwife's.

The caring model in, which Swanson proposed that five basic processes knowing, being with doing for, enabling and maintaining belief.

Knowing (empathy) is striving to understand the meaning of event in the life of others.

Being with (presence) means sharing feelings without burdening the one cared for.

Doing for (Evidence based practice) means to do for others what one would do for self if at all possible.

Enabling (empowerment) is facilitating the others passage through life transition and unfamiliar events by focusing the others.

Maintaining belief(instilling hope) is sustaining faith in the other's capacity to get through an event or transition and face future with meaning.

In this present study midwives is maintaining belief that early suckling as effect on third stage of labour.

Knowing : The researcher knowing the demographic variable of mothers – age of the mother, type of delivery, gravida, total duration of first stage of labour, total duration of second stage of labour.

Being with refers to explaining the procedure to the mother, get the oral consent and observation of labour from second stage to third stage.

Doing for refers to initiating the early sucking technique to the experimental group.

Enabling refers to facilitating the change in total duration of third stage of labour and blood loss. It is observed by observation record sheet.

Maintaining belief early suckling avoids third stage labour complication and enhances more interaction between mother and infant to have continuous breast feeding.

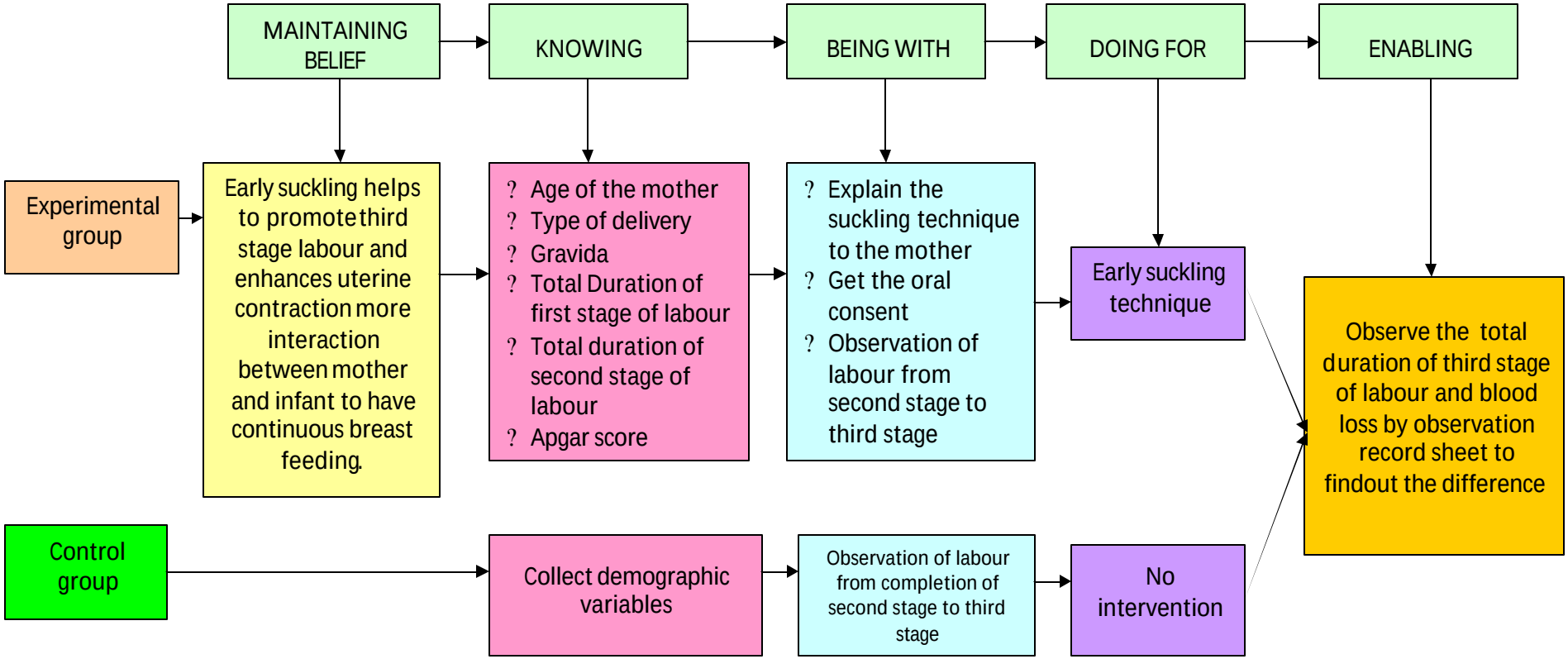

FIG-1.1: CONCEPTUAL FRAMEWORK BASED ON KRISTEN M. SWANSON THEORY OF CARING (1993) ON EFFECTIVENESS OF EARLY SUCKLING ON THIRD STAGE OF LABOUR

Summary

This chapter dealt with introduction, need for the study, statement of the problem, objectives, hypothesis, operational definition, assumptions, delimitations and conceptual framework.

CHAPTER – II

REVIEW OF LITERATURE

Review of literature is an essential component of the research process. It is a critical examination of publications related to the topic of interest. Review should be comprehensive and evaluative. It helps to plan and conduct the study in a systematic and scientific manner.

For the present study, the related literature was reviewed and organized as following.

I. Studies related to third stage of labour.

II. Studies Related to effectiveness of early suckling.

I. Studies related to Third Stage of Labour

Frank Silverman, (2010) stated that signs of placental separation include a gush of blood, lengthening of the umbilical cord, and anterior uphold movement of the uterine fundus, which becomes firmer and globular after the placenta detacher. Placental expulsion follows as a result of a combination of events including spontaneous uterine contraction downward pressure from the developing retroplacental haematoma, and an increase in maternal intraabdominal pressure. In tertiary hospital was assessed length of third stage labour. Length was 5 to 6 mts, 90% of placenta was delivered within 15 mts, and 97% delivered within 30 minutes of birth.

Metin Altay, A., (2007) conducted a study on the location of placenta at term pregnancies affects the duration of the third stage of labor. The placental implantation was determined as anterior (n= 78), posterior (n=59), or fundal (n=64) by ultrasound, in 201 woman with singleton pregnancies. After delivery of the newborns oxytocin

routinely given. The duration of third stage of labor was 10.36? 5.94 min, 10.44? 5.35 min, and 8.12? 4.25 min with placentas located anteriorly, posteriorly, and fundal, respectively. The length of third stage labour was approximately 2 minutes shorter in the fundal placenta group compare to the other two groups.

Path, (2006) conducted a comparative study on assessing the effectiveness of active management of third stage of labour. Among antenatal mothers by using quasi experimental design, the data was analysed through observation and measurable method. Active management of third stage of labour reduced the risk of prolonged third stage beyond 30 minutes when compared to supplemental oxytocin and bimaual compression.

Magnn, (2005) conducted a prospective observational study to estimate the whether the length of the third stage of labour is correlated with postpartum hemorrhage. Women delivering vaginally in tertiary obstetric hospital were assessed postpartum haemorrhage. During 24 months period there were 6,588 vaginal deliveries in a single tertiary obstetric hospital and PPH occurred in 335 (5.1%) of these. The median length of third stage labour was similar in women having and those not having a postpartum haemorrhage. The risk of postpartum haemorrhage was significant, at 95% of them got 10mts of completion of third stage of labour ,95% of them got 20 mts, of completion of third stage of labour (95%). Of them got 30mts. The best predictors for PPH using recover operating characteristics curve was 18mts.

Dutta, (2004) stated that separation of the placenta is achieved by marked reduction in the uterine surface of the placental site following delivery due to retraction.

Alvarez, H, (2001) conducted a study on uterine contractility in the 3rd stage of labour. After birth of the child, the umbilical vein is connected with a mercury manometer, which records the pressure exerted on the placenta by the contractions of the upper segment during the third stage of labour. Their average intensity (50mm/Hg) and frequencies 4/10mts are similar to those of the second stage but they are absolutely painless. Placenta and it membranes seperate and expelled by these uterine contractions. They also derive blood from the placenta to the child. The upper segment time (U.S.T) is measured from the birth of the child to the moment in which the placenta is expelled from the upper segment. Its average value in normal case is six minutes between ten and thirty minutes is prolonged U.S.T and more than thirty minutes is the retention of placenta.

Dutta. D.C, (2001) reported that the third stage begins after the expulstion of the fetus and ends with the expulsion of the placenta and membranes. Its average duration is 10-15mts.

Vanaja Kumari, (2001) reported that the incidence of third stage complication like haemorrhage, obstetric shock, uterine inversion, septicaemia, obstetric hysterectomy was constant if third stage is more than 30 mts and then rose progressively as time passed. Out of 6 cases referred from outside with retained placenta, 3 had delivered before 2 hrs. 2 had delivered after 3 hours and 1 had delivered before 6 hours.

Egebo, (2000) conducted a study to know the validation of laboratory method of measuring postpartum blood loss, at gynecological operations collected in measurable bottle among postnatal mothers in Singapore. The measured amount of blood (50-1000 ml) was poured into the absorbent paper and sanitary pads, in order to mimic conditions, when measuring blood loss in clinical trials in the postpartum

period. The amount of blood absorbed into the absorbent paper and sanitary pads was measured by rapid method of automatic alkalin hematin. The study showed that the method produced a reliable accurate means of measuring blood loss.

II. Studies Related to Effectiveness of Suckling

Marshall Kalus, (2009) conducted a study among mother and infant on Early emotional ties, Swedish researcher observed that if an infant's lips touched her mother's nipple in the first hour of life, the mother kept her infant 100 minutes longer every day than mothers who did not experience suckling until later. It should be noted when the infant suckles from breast there is an outpouring of 19 different gastrointestinal hormones in both the mother and the infant. As a result, with each feeding, there is an increased intestinal surface area for nutrient absorption. The hormonal release is stimulated by the touch of the mother's nipple by her infant's lips. This increases oxytocin in both the mother's brain and the infant's brain, which stimulates the vagus nerve, then causes the increase in the output of gastrointestinal hormones. Plasma oxytocin was found to be elevated following birth in women who held their infants skin to skin, notably the oxytocin peaked after expulsion of the placenta. After one or two suckling periods, the blood oxytocin became elevated with each breastfeeding. These increased levels may enhance the bonding of the mother to her infant as well as contract the uterine muscle to prevent bleeding.

W. Jonas., (2008) conducted a study aimed to investigate the pattern of maternal blood pressure before during and after a breast feed 2days postpartum. Additionally, blood pressure during the following 25-weeks breast feeding period was investigated. 66 primigravida with normal deliveries were consecutively selected. Blood pressure was measured at 5,10,30 and 60 minutes in connection with a morning breast feed. 33 women continued to measure blood pressure before and after

breast feeding for 25 weeks. Blood pressurefall significantly in response to breast feeding 2 days after birth. The fall in systolic and diastolic blood pressure amounted to 8.8 (SD=11.00) and 7.7 (SD=9.3) mmHg, respectively. During the 25-week followup period a significant fall of basal blood pressure (systolic, df =3, f=7.843, p<0.001; diastolic blood pressure df = 3, F=5.453, p=0.002) was observed. The total fall in systolic and diastolic blood pressure amounted to a mean of [SD=104] mmHg and 10(SD=9.7) mmHg, respectively. Both systolic and diastolicblood pressures fall during a breast feeding session, and pre-breast feeding blood pressure decreases during at least the first 6 months of a breast feeding period in a home like environment.

Bystrova. K, (2007) conducted a study on maternal axillar and breast temperature after giving birth in Sweden. The aim of this study was to find out the effects of delivery ward practices and early suckling on maternal axillar and breast temperatures during first 2 hours postpartum and to relate them to the infant's foot and axillar temperature. Three groups of 176 mother-infant pair and were randomized as follows, group-1 infants lying prone in skin to skin contact on their mothers chest by early suckling name skin to skin group (n=44), group-II infants who were dressed and lying prone on their mother's chest named mother's arm, Group-III infants who were dressed and kept in the nursery, named nursery group. Episodes of early suckling noted, maternal axillar and breast temperature was measured and infants axillar and foot temperatures were measured at 15 minutes intervals from 30 to 120 minutes after birth. The axillar and breast temperatures raise significantly in all mothers in skin to skin early suckling group and lowest in mothers in the nursery group.there was a positive relationship was found between the maternal axillar temperature and the infant foot and axillar temperature 90 minutes after the start of

the experiment in the skin to skin and mother's arms groups. The infant's foot temperature was nearly twice than in the axillar temperature. No such relationship found in the nursery group. Maternal temperature rose after birth and skin to skin contact and early suckling increased temperature variation. There was a relationship between maternal temperature and infant foot and axillar temperatures.

D.W. Irons conducted a study (2005) to determine the effect of nipple stimulation on uterine activity during the third stage of labour. Randomized sampling technique was used (i) nipple stimulation was given for 6 samples up-to 15 minutes, (ii) regular oxytocin injection was given for 3 samples, (iii)there was no intervention in control group. Total 5 samples were in control group. Uterine activity was continuously measured using the placenta as an in-situ hydrostatis bag connected to a pressure transducer. Uterine pressure was 103 mm of Hg in the nipple stimulation group, whereas in control group it was 70.8mm Hg. The duration of the third stage and blood loss tended to be reduced with nipple stimulation compared to control (20.3 versus 12.3 min) and (257 versus 166 ml). These findings shows nipple stimulation group got higher uterine pressure than control group. If parenteral oxytocin is not available, nipple stimulation might reduce the incidence of postpartum hemorrhage.

Karan M. Edmond, (2005) conducted a study in rural Ghana involving all women in child bearing age and their infants. It was designed to evaluate weather timing of initiation of breast feeding associated with risk of neonatal mortality. Breastfeeding was initiated within the first day of birth in 71% of infants and by the end of day 3 in all but 1.3% of them; 70% were exclusively breastfed during neonatal period. The risk of neonatal death was four times higher in children who are given milk based fluids or powder in addition to breastfeeding. There was marked dose response of increasing risk of neonatal mortality with increasing delay in initiation

of breast feeding from 1 hour to day 7; overall late initiation was associated with a 2.4 – fold increase in risk. Promotion of early initiation of breast feeding has the potential to make a major contribution to the achievement of the child survival millennium development goal; 16% of neonatal deaths could be saved if all infants were breast fed from day 1 and 22% if breastfeeding started within the first hour.

Rcordan, (2005) cited that early and frequent suckling may increases prolactin receptors in the breast making milk production more effective.

According to the statistical report that initial breast feeding rates were 78% in England, 70% in Scotland, 67% in Wales, and 63% in northern Ireland. **(Infant Feeding Survey, 2005)**.

Ann-Marie Widstron, (2004) conducted a study on short term effects of early suckling and touch of the nipple on maternal behaviour in Karolinska hospital, Sweden. The aim of this study was to evaluate the effects of suckling within 30 min after birth. Where skin to skin body contact for mothers and infants was held constant in both cases (n=32) and not in control groups (n=25). Mother infant interaction during breast feeding, infants time spent in nursery and different aspects of breast feeding were evaluated. Prolactin and gastin were measured in maternal serum before and after breast feeding on day 4 postpartum. The aim to evaluate effects of early post delivery suckling failed since only six of the 32 case infants did suck at this time. In spite of this, we found three significant differences among cases and controls. In the case group where all infants had touched or licked the areola and nipple, the mothers left the infants in the nursery for a significantly shorter time and significantly more mothers talked to their infants during the short breast feeding observation. Median gastrin levels were significantly lower in cases than in controls both before ($p<0.01$) and after ($p<0.03$) breast-feeding. In conclusion, the infant's early touch of the

mother's areola and nipple seemed to have positively influenced the mother / infant relationship during the first four days after birth.

Dilek Bilgic, et.al., (2004) conducted a study to evaluate the effect of early breast feeding on the duration of 3rd stage of labour and the mother infant interaction. Eighty five eligible subjects were divided into two groups in randomized manner. Early breast feeding group (n=43) and control group (n=42). The rate of placental delivery at the first 5-10 minutes of the third sage was significantly higher (83.3%, Vs 16.7%) in the early breast feeding group. This rate was found higher (92.6% Vs 7.4%) than those of preferring breast feeding more than 10 minutes (P<0.05). Mother-infant verbal interaction scores were significantly higher in the early breast feeding group (26.5? 4.4) thancontrol group (13.9 ? 3.6).

Ross products division, (2003) a goal set by the Department of Birth and Human Services (DBHS) for the year 2010 is for 75% of all new mother to breast feed at the time of birth. Facility discharge for at least 50% to be breast feeding at 10 months.

Dewan. N. Wood.L., et.al., (2002) conducted a study to determine the knowledge and attitude of teenage mothers towards breast feeding. Total number of samples(n=40). Teenagers had poorer knowledge about breast feeding than the non-teenagers and fewer teenagers considered breast milk is the best food for their baby. 23(57.5%) Vs 9(22.5) only one teenager had knowledge about colostrums.

Matthiesen. A.S. et.al., (2001) conducted a study on postpartum maternal oxytocin release by newborns and the effect of infant hand massage and suckling. Ten vaginally delivered infants whose mothers had not been exposed to maternal analgesia were video recorded from birth until the first breast feeding. Each infant's hand, fingers, mouth and tongue moments, positions of the hand, body and suckling

behaviour were assessed every 30 seconds. Maternal blood samples were collected every 15 minutes and oxytocin levels were analysed by radio immunoassay. The newborns use their hands as well as their mouth to stimulate maternal oxytocin release after birth which may have significance for uterine contractions, milk ejection and mother infant interaction.

Urvas-Moberg, (2000) conducted a study on early contact versus separation. The purpose of this study was to evaluate and compare possible long-term effects on mother-infant interaction of practices used in the delivery and maternity centre. A total of 176 mother infant pairs and were randomized into four experimental groups. Group-I skin to skin by early suckling, Group-II infants placed mother's arms after birth. Group-III infants were kept in the nursery after birth. Mothers in the maternity ward Group-IV infants were kept in the nursery after birth but roomed in. Episodes of early sucking in the delivery ward were noted. The mother infant interaction was video taped accordingly to the parent child early relational assessment (PLERA) 1 year after birth. The practice of skin contact, early suckling or both during the first 2 hours after birth when compared with separation between the mothers and their infants positively affected. Skin to skin contact for 25 to 120 minutes after birth, early suckling, or both positively influenced mother-infant interaction 1 year later when with separation of mother and infant.

Bullough, CH., (2000) conducted a study on early suckling and postpartum hemorrhage. A randomized controlled trial was carried out to determine whether suckling immediately after birth reduced the frequency of postpartum hemorrhage blood loss, and retained placenta. The trial subjects were attended by dais. 68 dais attended a course on third stage management and data collection. 23 in the early suckling group and 26 in the control group recorded blood loss in 2104 and 2123

deliveries of live born singletons respectively the frequency of PPH was 7.9 in the suckling group and 8.4% in the control group and the mean blood loss 258ml and 256ml respectively.

Summary

This chapter dealt with related literature was reviewed and organized by studies related to third stage of labour and studies related to effectiveness of suckling.

CHAPTER III

METHODOLOGY

The methodology of research indicates the general pattern of organizing the procedure for gathering valid and reliable data for the purpose of investigation. **(Polit and Hungler, 2003)**

This chapter consists of description of the research methodology adapted by the investigator to evaluate the effectiveness of early suckling on third stage of labour it includes research approach, design, variables, settings, population and sampling technique, sample size, criteria for sample selection, development of the tool, pilot study, data collection, procedure and plan for data analysis.

Research Approach

An evaluative research approach was selected for this study. Evaluative approach is an applied form of research that involves finding out how well the program practice, procedure policy are working. In this study the investigator need to evaluate the effectiveness of early suckling on third stage of labour among parturient women in selected hospital, Salem. Hence evaluate approach was more appropriate to this study.

Research Design

Quasi experimental post-test only control group design was used.

E	**X**	**O_1**
C		**O_1**

E - experimental group

C - control group

X - intervention

O_1 - post-test

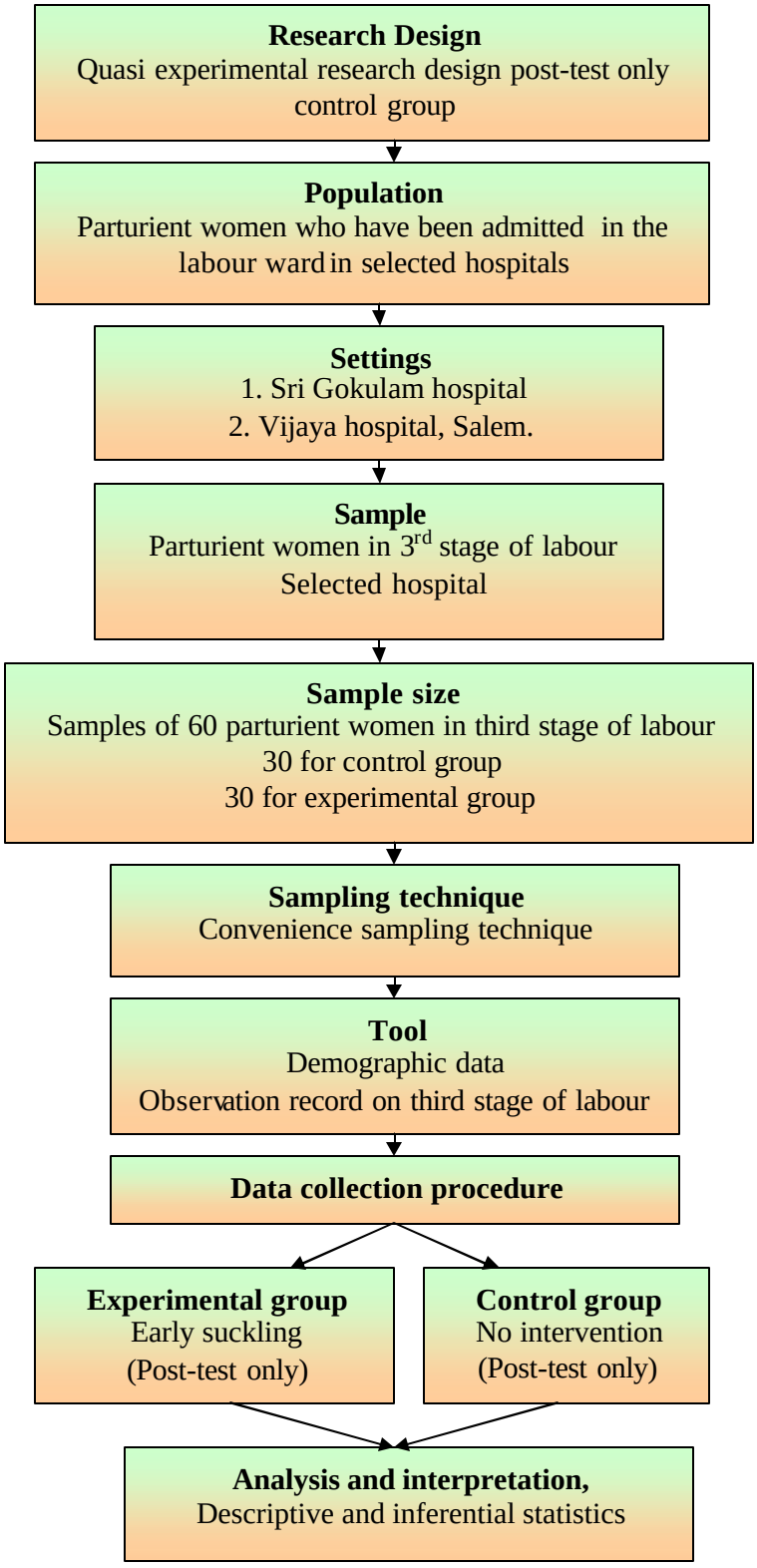

Figure -3.1: Schematic Representation of Research Methodology

Population

Parturient women who have been admitted in the labour ward in selected hospitals.

Setting

Setting is the general location and condition in which data collection takes place for the study. **(Polit and Hungler, 2003)**

The study was conducted in labour room of Vijaya Hospital, Salem. It is located at Ramakrishna Road, 4 roads, Salem. 2km near from New Bus stand. It is 50 bedded hospital, it includes various department of obstetrics and gynecology. Every day census of the labour room is approximately 10-15 and mothers who are getting normal delivery is nearly 10 per day. Another setting is Sri Gokulam Hospital. It is situated in the 5 roads, Salem. It is 1km from New bus stand. It is 250 bedded hospital it includes various department of obstetrics and gynecology. Every day census of the labour room was approximately 10-15 and mothers who are delivered by normal nearly 7 per day which includes both primigravida and multigravida.

Sampling

Sample:

Sample consists of parturient women in third stage of labour in selected hospital.

Sample size:

Sample size was 60 parturient women. Among them 30 for experimental group and 30 for control group.

Sampling technique:

In this study convenience sampling technique was adopted.

Criteria for sample Selection

Inclusion criteria:

1. Parturient women those who were in third stage of labour.
2. Parturient women who were undergoing normal vaginal delivery with or without episiotomy.
3. Gestational age between 38 and 42 weeks.
4. Singleton pregnancy with a live fetus.

Exclusion criteria:

1. Women with systemic and psychiatric disorder.
2. Nipple abnormalities.
3. Fetal abnormalities.
4. Placental disorders.
5. 1 minute APGAR score of less than 7.
6. Women with dystocia.
7. Pregnant women who are not willing to participate during the data collection.

Variables

Independent Variable: Early suckling of newborn on mothers breast.

Dependent Variable: Duration of placental separation and total blood loss during third stage of labour among parturient women.

Extraneous variable: Parturient women's age, type of delivery, duration of second stage of labour.

Description of the Tool

Selection and development of tool.

The tool is prepared by the investigator after an extensive study of the related literature and with the guidance of experts. It includes data regarding demographic variable and observation record sheet to assess the effectiveness of early suckling on third stage of labour.

The tools consist of two sections,

Section-A:

Section A consists of demographic data such as age of the mother, type of delivery, total duration of third stage of labour, total duration of second stage of labour , Apgar score of the new born at 1 minute, gravida.

Section-B: Structured Observation record on third stage of labour.

It includes time of delivery , duration of placental separation, lengthening of cord expulsion of placenta, total duration of third stage of labour and blood loss.

The total duration of third stage labour was categorized in following division 8-10mts, 11-13mts, 14-16mts, ? 16mts .

The total blood loss during third stage of labour was categorized in to following divisions 100-150 ml , 151-200ml, 201 -250ml, 250-300ml.

Validity and Reliability

Validity

Content validity is concerned with the sampling adequacy of items for the constrict that is being measured. Content validity is relevant for both effective measure and cognitive measure.

Validity of the tool was obtained from 2 Medical experts and 3 Nursing Experts. The tool was found adequate and it was certified by the experts.

Reliability

Reliability of the tool was established by interrater reliability test, and it was found r^1=0.8. Hence the tool was reliable to proceed this study.

Pilot Study

Pilot study was conducted over a period of 7 days from 07.06.2010 to 13.06.2010 in Vijaya hospital, Salem. A total number of 6 samples who met the inclusion criteria were obtained by using non probability convenience sampling technique. The study was conducted and data was collected by prepared observation record sheet and checked for feasibility.

Method of Data Collection

Ethical consideration:

Prior to data collection written permission was obtained from the Managing Director of Sri Gokulam Hospital, Salem and Sri Vijaya Hospital, Salem.

Informed oral consent was obtained from mother.

Data collection period:

The data was collected for a period of 4 weeks from 5.07.2010 to 31. 07. 2010.

Data collection procedure:

The total sample of 60 parturient women were selected who met the inclusion criteria by convenience sampling technique. Among them 30 were in experimental group and 30 were in control group from Sri Gokulam Hospital and Vijaya Hospital respectively. At the completion of second stage of labour, the blood loss was measured by giving pad to the person who was conducting delivery. After the baby was born APGAR score was checked at one minute. The newborn face was wiped and

wrapped with sterile linen and the baby was put on the mother's breast at areola and checked for effective suckling pattern until the completion of third stage of labour. The time of placental separation was observed and blood loss was measured and documented in observation record on third stage of labour.

Plan for Data Analysis

The collected data will be organized and analysed as per the following sections,

Section A: Frequency and percentage distribution of parturient women in experimental and control group according to their selected demographic variables.

Section B: Comparison of third stage of labour and blood loss among parturient women in experimental and control group.

a) Frequency and percentage distribution of total duration of third stage of labour and blood loss among parturient women in experimental and control group.

b) Mean, SD, mean percentage and difference in mean percentage on third stage of labour (total duration of third stage of labour and total blood loss) among parturient women in experimental and control group.

Section-C: Hypotheses testing

a) Effectiveness of early suckling on third stage labour among parturient women in experimental and control group.

b) Association on third stage of labour (the total duration of third stage of labour and blood loss) among parturient women in experimental and control group with their selected demographic variables.

The collected data will analysed by descriptive and inferential statistics.

Summary

This chapter dealt with methodology, it consists of research approach, research design, population, settings, sampling variables, description of the tool, validity and reliability, pilot study and method of data collection and planned data analysis. The analysis and interpretation of the study is presented in the follow ing chapter.

CHAPTER – IV

DATA ANALYSIS AND INTERPRETATION

Polit and Hungler, (2008) states that statistical analysis is a method of rendering quantitative information and elicits meaningful and intelligible form of research data. Analysis and interpretation of data of this study was done using descriptive and inferential statistics.

This chapter deals with analysis and interpretation of data collected form 60 parturient women. To evaluate the effectiveness of early suckling on third stage labour among parturient women. The purpose of the analysis is to reduce the data to a manageable and interpretable form. So that the research problem can be suited and tested.

Presentation of Data

The collected data was organized and analysed as per the following sections,

Section A: Frequency and percentage distribution of parturient women in experimental and control group according to their selected demographic variables.

Section B: Comparison of third stage of labour and blood loss among parturient women in experimental and control group.

a) Frequency and percentage distribution of total duration of third stage of labour and blood loss among parturient women in experimental and control group.

b) Mean, SD, mean percentage and difference in mean percentage on third stage of labour (total duration of third stage of labour and total

blood loss) among parturient women in experimental and control group.

Section-C: Hypotheses testing

a) Effectiveness of early suckling on third stage labour among parturient women in experimental and control group.

b) Association on third stage of labour (the total duration of third stage of labour and blood loss) among parturient women in experimental and control group with their selected demographic variables.

The collected data was analysed by descriptive and inferential statistics.

Section A

Table-4.1:

Frequency and percentage distribution of parturient women among experimental and control group according to their selected demographic variables.

n=60

S. No	Demographic variables	Experimental group (n=30)		Control group (n=30)	
		f	%	f	%
1.	**Age of the mother**				
	a. ? 20 yrs	01	03.33	03	10.0
	b. 21 – 25 yrs	23	76.67	24	80.0
	c. 26-30 yrs	05	16.67	03	10.0
	d. ? 31 yrs	01	03.33	-	-
2.	**Type of de livery**				
	a. Spontaneous	30	100	30	100
3.	**Total duration of first stage of labour**				
	a. 6 – 12 hrs	30	100	24	80.0
	b. 13 – 24 hrs	-	-	06	20.0
4.	**Total duration of second stage of labour**				
	a. < 30 mts	16	53.33	24	80.0
	b. 30 mts – 1 hr	14	46.67	06	20.0
	c. 1 hr – 2 hrs	-	-	-	-
5.	**APGAR score of the newborn at 1 mt**				
	a. 7	-	-	-	-
	b. 8	-	-	-	-
	c. 9	03	10.0	-	-
	d. 10	27	90.0	30	100
6.	**Gravida**				
	a. Primigravida	14	46.67	26	86.77
	b. Multigravida	16	53.33	04	13.33

In experimental group 23(76.67%) of them were in 21-25 years, 30(100%) of them had spontaneous delivery, 30(100%) of them total duration of first stage of labour was 6-12 hrs. About 16(53.33%) of them total duration of second stage of labour was < 30mts, and 27(90%) of their newborn got APGAR score of 10 at 1mt. About 14(46.67%) of them belongs to primigravida, 16(53.33%) of them belongs to multigravida.

In control group 24(80%) of them were in 21-25 yrs, 30(100%) of them had spontaneous delivery. About 24(80%) of them total duration of first stage of labour was 6-12hrs. About 24(80%) of them total duration of second stage of labour was <30 mts. All (100%) of their newborn got APGAR score of 10 at 1 minute. About 26(86.67%) of them belongs to primigravida, 4(33.33%) of them belongs to multigravida.

Section-B

Comparison of Third Stage of Labour (Total Duration Third Stage of Labour and Total Blood Loss) Among Parturient Women in Experimental Group and Control Group

Table-4.2:

Frequency and percentage distribution of total duration of third stage of labour and blood loss among parturient women in experimental and control group.

n=60

S. No	Demographic variables	Experimental group (n=30)		Control group (n=30)	
		f	%	f	%
1.	**Total duration of third stage of labour**				
	a. 8-10 mts	24	80	10	33.33
	b. 11-13 mts	4	13.33	14	46.67
	c. 14-16 mts	2	6.67	6	20
	d. ? 16 mts	-	-	-	-
2.	**Blood loss**				
	a. 100 – 150ml	23	76.67	9	30
	b. 151 – 200 ml	6	20.00	12	40
	c. 201 – 250 ml	1	3.33	9	30

+

The above table shows that the total duration of third stage of labour and total blood loss. In experimental group 24(80%) of them had 8-10 minutes on the total duration of third stage labour , 4(13.33%) of them had 11-13minutes, and 2(6.67%) of them had 14-16 minutes. Whereas in control group 10(33.33%) of them had 8-10minutes, 14(46.67%) of them had 11-13 minutes, 6(20%) of them had 14-16 minutes. In experimental group 23(76.67%) of them had 100-150 ml of total blood loss 6(20%) of them had 151-200ml. Whereas in control group 9(30%) of them had 100-150ml, 12(40%) of them had 151-200 ml, 9(30%) of them had 151- 200ml .

Table – 4.3 :

Mean, SD and mean percentage and difference in mean percentage on third stage of labour (Total duration of third stage of labour and total blood loss) among parturient women in experimental and control group.

n=60

S. No	Groups	Total duration of third stage of labour (in minutes)				Total blood loss during third stage of labour (in ml)			
		Mean	SD	Mean %	Difference in mean %	Mean	SD	Mean %	Difference in mean %
1	Experimental group	9.23	1.79	57.68	16.25	136.50	33.27	45.50	14.50
2	Control group	11.833	2	73.93		180.00	36.10	60	

The above table shows that, in experimental group the mean value of total duration of third stage of labour was 9.233? 1.79, mean percentage was 57.68%, Whereas in control group mean value was 11.83± 2, mean percentage was 73.93%. Difference in mean percentage between the experimental and control group was 16.25%.

In experimental group the mean value of total blood loss was 136.50± 33.27, mean percentage was 45.50% whereas in control group the mean value was 180± 36.10, the mean percentage was 60%. Difference in mean percentage between the experimental and control group was 14.50%.

This reveals that early suckling was effective on total duration of third stage of labour and total blood loss.

Section – C

Hypotheses Testing

Table – 4.4:

a) Effectiveness of early suckling on third stage labour among parturient women in experimental group and control group

n=60

S. No	Groups	Total duration of third stage of labour			Total blood loss during third stage of labour		
		Mean	SD	't' value	Mean	SD	't' value
1	Experimental group	9.23	1.79	5.29*	136.50	33.27	4.85*
2	Control group	11.83	2		180	36.10	

*** significance at p<0.05 levelTable value 1.96**

The above table shows that, in experimental group the mean value of total duration of third stage of labour was 9.23? 1.79, whereas in control group it was 11.83 ? 2.00 and obtained 't' value 5.29 shows that significant difference between experimental and control group on total duration of third stage of labour at p<0.05 level.

In experimental group the mean value of total blood loss during third stage of labour was 136.50? 33.27, whereas in control group it was 180? 36.10 and obtained 't' value 4.85 shows that significant difference between experimental and control group on blood loss during third stage of labour at p<0.05 level.

Therefore formulated hypothesis H_1 was retained. There was strong influence on duration of third stage of labour and blood loss by early suckling.

b) Association on Third Stage of Labour Among Parturient Women in Experimental Group and Control Group with their Selected Demographic Variables

Table–4.5:

Chi-square analysis on third stage of labour among parturient women in experimental group and control group with their selected demographic variables.

n=60

Demographic variables	Experimental group (n=30)						Control group (n=30)					
	Total duration of 3rd stage of labour			Blood loss during 3rd stage of labour			Total duration of 3rd stage of labour			Blood loss during 3rd stage of labour		
	$?^2$	Df	Table value	$?^2$	df	Table value	$?^2$	df	Table value	$?^2$	df	Table value
Age of the mother	8.38	6	12	0.78	6	12	1.50	4	-	1.63	4	9.49
Total duration of first stage of labour	-	-	-	-	-	-	0.24	2	-	0.31	2	5.99
Total duration of second stage of labour	3.46	2	5.99	1.20	2	.99	1.16	2	-	1.27	2	5.99
APGAR score of new born at 1 minutes	0.53	4	9.49	0.53	4	9.49	-	-	-	-	-	-
Gravida	1.56	2	5.99	2.36	2	5.99	0.93	2	-	0.91	2	5.99

* significant at p< 0.05 level

The table – 4.5 shows that, there was no significant association on third stage labour (total duration of 3rd stage of labour and blood loss) among parturient women in experimental and control group with their selected demographic variables such as age, type of delivery, duration of first stage labour, duration of second stage of labour, APGAR score and gravida at $p < 0.05$ level. Hence, H_2 is rejected.

Summary

This chapter dealt with data analysis and interpretation in the form of statistical values based on the objectives. Descriptive statistics such as frequency and percentage distribution, mean, standard deviation, mean percentage and difference in mean percentage were used to analyse demographic variables total duration of third stage of labour and blood loss. Inferential statistics such as 't' test and chi-square test were used to analyse effectiveness of early suckling on third stage of labour among parturient women in experimental and control group.

CHAPTER V

DISCUSSION

Introduction

The purpose of this study was to evaluate the effectiveness of early suckling on third stage of labour among parturient women in experimental and control group in selected hospitals, Salem.

Demographic variables

In experimental group 23 (76.67%) of them were in 21 -25 years, 30(100%) of them had spontaneous delivery, 30 (100%) of them total duration of third stage of labour was 6-12 hours. About 16 (53.33%) of them total duration of second stage of labour was < 30minutes,and 27 (90%)of their newborn got APGAR score of 10 at 1 mt. About14(46.77%) of them belongs to primigravida, 16(53.33 %)of them belongs to multigravida,.

In control group 24 (80%) of them were in 21- 25 years, 30(100%)of them had spontaneous delivery. About 24(80%) of them total duration of first stage of labour was6-12hours.About24(80%) of them total duration of second stage of labour was<30 minutes. All of their new born got APGAR score of 10 at 1 minute. About 26(86.67%) of them belongs to primi gravida, 4(33.33%) of them belongs to multi gravida

- The findings of the present study was supported by, **Jinu K John, (2008)** conducted a study on effectiveness of suckling technique on selected physiological outcomes during the third stage of labour among mothers in selected hospital at Kerala. In experimental group 10(67%) of them were in 21-25 years, 12(80%) of them belongs to primigravida , 3(20%) of them belongs to multigravida, where as in control group 11(73%) of them were in

21- 25 years, 11(73%)of them belongs to primigravida and 4(27%) of them belongs to multi gravida.

- And also findings of the present study was supported by **DilekBilgek, (2004)** conducted a study regarding the effect of early breast feeding on duration of the third stage of labour and enhances the infant mother interaction. In experimental group 19(52.8%) of them were in 20-24 years, 19(52.8%) of them belongs to primigravida, 17(47.2%) of them belongs to multigravida, whereas in control group 23(63.9%) of them were in 20-24 years, 14(38.9%) of them belongs to primigravida, and 22(61.1%) of them belongs to multigravida.

Comparison of third stage of labour (total duration of third stage of labour and blood loss) among parturient women in experimental and control group.

- In experimental group 24(80%) of them had 8-10 minutes on total duration of third stage of labour , 4(13.33%) of them had 11-13minutes, and 2(6.67%) of them had 14-16 minutes. Whereas in control group 10(33.33%) of them had 8-10minutes, 14(46.67%) of them had 11-13 minutes, 6(20%) of them had14-16 minutes.
- In experimental group 23(76. 67%) of them had 100-150 ml of total blood loss 6(20%) of them had 151-200ml. Where as in control group 9(30%) of them had 100-150ml, 12(40%) of them had 151-200 ml, 9(30%) of them had 151-200 ml.
- In experimental group the mean value of total duration of third stage of labour was 9.233? 1.79, mean percentage was 57.68%, whereas in control group mean value was 11.83+ 2, mean percentage was 73.93%. Difference in mean percentage between the experimental and control group was 16.25%.

- In experimental group the mean value of total blood loss was 136.50± 33.27, mean percentage was 45.50% whereas in control group the mean value was 180± 36.10, the mean percentage was 60%. Difference in mean percentage between the experimental and control group was 14.50%.
- This reveals that early suckling was effective on total duration of third stage of labour and total blood loss.

1. Effectiveness of early suckling on third stage of labour among parturient women in experimental and control group

The calculated "t" value5.29 shows that significance difference between the experimental and control group on total duration of third stage of labour at $p<0.05$ level.

The calculated "t" value 4.85 shows that significance different between the experimental and control group on total blood loss during third stage of labour at $p<0.05$ level. This reveals that early suckling had strong influences on total duration of third stage of labour and blood loss at $p < 0.05$ level.

The study was supported by **Dilek Bil Gic, (2004)** the study shows that in early breast feeding group the rate of placental delivery at the first 5-10 minutes of the third stage was significantly higher 30(83.3%) $p<0.05$ level, but in control group the rate of placental delivery 15(41.7%) was very less. Mother - infant verbal interaction scores were significantly higher in the early breast feeding group (26.5? 4.4) than those of the control group (13.9 ? 3.6). The result of the study was early suckling or early breast feeding decrease the duration of the third stage of labour and increase the mother-infant interaction.

2: To associate the third stage of labour among parturient women in experimental and control group with their selected demographic variables.

There was no significant association found on total duration of third stage labour and total blood loss, among experimental group and control group with their selected demographic variables.

Summary

The discussion is made in this chapter based on the objectives of present study and it was supported with similar studies conducted by other investigators.

CHAPTER VI

SUMMARY, CONCLUSION, IMPLICATIONS AND RECOMMENDATIONS

Summary of the Study

A Quasi experimental post-test only control group design was chosen to evaluate the effectiveness of early suckling on third stage of labour in parturient women at selected hospitals, Salem.

It includes objectives, hypotheses; the conceptual framework for the study was based on Kristen. M. Swanson Theory of Caring Model, (1993).

The main study was conducted in the month of July 2010 at Sri Gokulam hospital and Sri Vijaya hospital, Salem. The total sample of 60 parturient women were selected according to their inclusion criteria by convenience sampling technique among them 30 were in experimental group, 30 were in control group. The data collection tool consists of two sections. Section-I, demographic variables of parturient women and section–II were observation record sheet on third stage of labour.The data was analyzed by using descriptive and inferential statistics.

The study findings are summarized as follows;

1. Demographic variables of parturient women

- **In experimental group** 23(76. 67%) of them were in 21-25 years 30(100%) of them had spontaneous delivery, 30(100%) of them Total duration of first stage of labour was 6-12 hrs, 16(53.33%) of them total duration of second stage of labour was < 30mts, 27(90%) of their newborn got APGAR score of 10 at 1mt, 14(46.67%) of them belongs to primigravida, 16(53.33%) of them belongs to multigravida,
- **In control group** 24(80%) of them were in 21-25 yrs, 30(100%) of them had spontaneous delivery, 24(80%) of them total duration of first stage of labour

was 6-12hrs, 24(80%) of them total duration of second stage of labour was <30 mts, (100%) of their newborn got APGAR score of 10 at 1 minute, 26(86.67%) of them belongs to primigravida, 4(33.33%) of them belongs to multigravida.

The findings regarding effectiveness of early suckling on third stage of labour in parturient women.

- In experimental group about 24(80%) of them had 8-10 minutes on total duration of third stage of labour whereas in control group 10(33.3%) of them had 8-10 minutes, 14(46.67%) of them had 11-13 minutes.
- In experimental group 23(76.67%) of them had 100-150 ml of total bloodloss, whereas in control group 9(30%) of them had 100-150ml 12(40%) of them had 151-200 ml.
- In experimental group the mean value of total duraton of third stage of labour was 9.23 $\pm$1.79 whereas in control group it was 11.83$\pm$ 2.
- In experimental group the mean value percentage of total duration of third stage of labour was 57.68 % whereas in control group it was 73.93%.
- The difference in mean percentage of total duration of third stage of labour between experimental and control group was 16.25%.
- Difference in mean percentage of total blood loss between experimental and control group was 14.50%.
- This reveals that early suckling was more effective on total duration of third stage of labour compare to total blood loss.
- The calculated 't'-value 5.29 shows that the significant difference between the experimental and control group on total duration of third stage of labour at $p<0.05$ The calculated 't'-value 4.85 shows that the significant difference

between the experimental and control group on total blood loss at $p<0.05$ level.

- Therefore formulated hypothesis H_1 was retained. The study shows the early suckling had strong influence on duration of third stage of labour and blood loss.
- The chi-square analysis was used to find out the association which shows that there was no significant association found on total duration of third stage of labour and total blood loss among parturient women in experimental and control group with their selected demographic variables. Therefore hypotheses H_2 was rejected.

Conclusion

The study findings revealed that early suckling is an effective intervention on duration of third stage of labour and blood loss.

There was no significant association found between the third stage of labour with their selected demographic variables like age, type of delivery and gravida.

Implications for Nursing Practice

There are several important implications for nursing practice.

Nursing service:

- Early suckling demonstration classes can be conducted in hospital and maternity and child health centre.
- Establish the practice of early suckling as a routine management of third stage labour.
- Make awareness about effectiveness of early suckling in hospital and maternity centers.

- ? Midwives can plan the nursing management and enhance the nurse patient relationship and sense of cooperation, sense of well being of the mother, and baby through the development of mutually agreed goa ls.
- ? Have a written early suckling policy and training that is routinely communicated to all health care staff.
- ? Educate all pregnant women about advantages of breast feeding.

Nursing education:

- ? The curriculum may be reasonable to nurses knowledge in the field of obstetrics, but the nurse educators have the additional responsibility to update their knowledge on early suckling on third stage of labour this can be done in collaboration with the nurse administrator by planning and conducting continuing educational programmes.
- ? The teachers can work together in clinical area to disseminate knowledge on early suckling.

Nursing administration:

- ? The nurse administrator coordinates her work along with the staffs, to encourage the parturient women for the co-operatio n of early suckling on third stage of labour.
- ? Midwifery department should have policy and decision to use early suckling practice during third stage of labour as one of the essential nursing activity to reduce the duration of third stage labour and reduce the blo od loss.
- ? Nursing administrator should organize inservice educational programme to staff nurses regarding early suckling on third stage of labour for parturient women.

Nursing research:

- There is a need to find out various innovative methods on early suckling to reduce the duration of third stage labour and reduce the blood loss.
- The study will be a valuable reference material for future researcher.

Recommendation for Further Research

- A comparative study can be conducted between primigravid and multigravid women on effectiveness of early suckling on third stage of labour.
- A similar study can be done using the large sample primigravid women.
- A similar study can be conducted to findout other aspect of effectiveness of early suckling such as mother baby bonding, temperature maintenance, mother's psychology, baby's behaviour, increasing suckling response of the baby.

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ANNEXURE - A

LETTER SEEKING PERMISSION TO CONDUCT A RESEARCH STUDY

SRI GOKULAM COLLEGE OF NURSING
3/836, Periyakalam, Neikkarapatti, Salem - 636 010.
Phone : 0427 - 6544550 Fax : 0427 - 2270200, 2447077
Email : sgcon2001@yahoo.com, sgcon2001@gmail.com

Date : .....
03-07-2010

To

Dr. P. Chellammal, MD, DGO.,
Consultant, Obstetrician & Gynecologist
Sri Gokulam Hospital,
Salem.

Respected Sir/Madam,

Sub: Permission to conduct a Research Study request reg.

This is to introduce Mrs.Shenpagavalli .S.(Msc. Nursing) student of our college. She is to conduct Research project which is to be submitted to the Tamilnadu Dr.M.G.R.Medical University,Chennai in partial fulfillment of University requirement for the award of M.Sc.(Nursing)Degree.

Topic: A Study to Evaluate the Effectiveness of Early Suckling on Progress of Third Stage of Labour among Parturient Women in Selected Hospitals, Salem.

I request you to kindly permit her to conduct the study in your esteemed Hospital from 05.07.10.to 31.07.10. She will adhere to the Hospital policies and regulations.

Thanking you.

Yours Sincerely,

(Prof. A. Jayasudha)
PRINCIPAL
Sri Gokulam College of Nursing
3/836, Periakalam, Neikkarapatti
SALEM - 636 010

Yes please

Dr.P. CHELLAMMAL, M.D.,D.G.O.,
Consultant Obstetrician & Gynaecologist
Regn. No. 22578.

LETTER SEEKING PERMISSION TO CONDUCT A RESEARCH STUDY

SRI GOKULAM COLLEGE OF NURSING
3/836, Periyakalam, Neikkarapatti, Salem - 636 010.
Phone : 0427 - 6544550 Fax : 0427 - 2270200, 2447077
Email : sgcon2001@yahoo.com, sgcon2001@gmail.com

Date : 03-07-2010

To

Dr. Vijaya, MBBS,DGO
Vijaya Hospital
Salem.

Respected Sir/Madam,

Sub: Permission to conduct a Research Study request reg.

This is to introduce Mrs.Shenpagavalli .S.(Msc. Nursing) student of our college. She is to conduct Research project which is to be submitted to the Tamilnadu Dr.M.G.R.Medical University,Chennai in partial fulfillment of University requirement for the award of M.Sc.(Nursing)Degree.

Topic: A Study to Evaluate the Effectiveness of Early Suckling on Progress of Third Stage of Labour among Parturient Women in Selected Hospitals ,Salem.

I request you to kindly permit her to conduct the study in your esteemed Hospital from 05.07.10.to 31.07.10. She will adhere to the Hospital policies and regulations.

Thanking you.

Yours Sincerely,

3/7/10

(Prof. A. Jayasudha)

PRINCIPAL
Sri Gokulam College of Nursing.
3/836, Periakalam, Neikkarapatti
SALEM - 636 010

Permitted

Dr. S. VIJAYAKUMARI M.D.,B.S., DGO. 10
Reg. No: 23088,
VIJAYA HOSPITAL,
Rajaji Road, SALEM - 636 007.

ANNEXURE - B

TOOL FOR DATA COLLECTION

SECTION–I: STRUCTURED ASSESSMENT TOOL FOR DEMOGRAPHIC DATA

Instructions:

The following questions collect the baseline information about the mothers. The investigator will put the (✍) mark in the appropriate choice which suits you the best in the given box. The data collected will be kept confidential.

1. Age of the mother
    a. ? 20 years ( )
    b. 21 – 25 years ( )
    c. 26 – 30 years ( )
    d. ? 31 years ( )
2. Type of delivery
    a. Spontaneous ( )
    b. Induced ( )
3. Total duration of first stage of labour
    a. 6-12 hrs ( )
    b. 13 – 24 hrs ( )
    c. > 24 hrs ( )
4. Total duration of second stage labour
    a. < 30 minutes ( )
    b. 30 mts - 1 hr ( )
    c. 1 hr – 2 hrs ( )
    d. > 2 hrs ( )
5. Apgar score of the newborn at 1 minute
    a. 7 ( )
    b. 8 ( )
    c. 9 ( )
    d. 10 ( )
6. Gravida
    a. Primigravida ( )
    b. IInd Gravida ( )
    c. IIIrd Gravida ( )
    d. IVth Gravida ( )

SECTION–II: OBSERVATION RECORD ON PARTURIENT WOMEN DURING 3rd STAGE OF LABOUR

Instructions: The investigator maintains the observation record sheet.

S. No	Time of delivery at	Duration of placental separation Gushing of blood at	Lengthening of cord at	Expulsion of placenta at	Total duration of 3rd stage labour				Approximate Blood loss during 3rd stage of labour			
					8-10 min	11-13 min	14-16 min	? 16 min	100-150 ml	151-200 ml	201-250 ml	251-300 ml

PROCEDURE ON EARLY SUCKLING ON THIRD STAGE OF LABOUR

Content of Procedure

Type of care: Early suckling on third stage of labour.

Frequency : Only one time, immediately after birth of the baby.

Introduction:

Immediately after birth of the baby put on the mother's breast for early suckling. It helps to reduce the duration of third stage of labour and total blood loss.

Early suckling:

Baby is placed on mother's breast immediately after birth and suckling is initiated before expulsion of placenta.

Purpose :

1. To reduce the total duration of third stage of labour.
2. To reduce the total blood loss.

Preliminary assessment:

1. Explain the procedure to the parturient women.
2. Getting cooperation from the parturient women.

Steps of the procedure:

1. Prepare the mothers breast.
2. Assess the Apgar score of the newborn baby.
3. Baby face was wipe, and wrap by sterile linen.
4. Baby put on the mothers breast for early suckling.
5. Observe the time of placenta expulsion.
6. Assess the total amount of blood loss during third stage of labour.

After care:

1. Provide comfortable position.
2. Documentation of the procedure.

ANNEXURE - C

LETTER REQUESTING OPINION AND SUGGESTIONS OF EXPERTS FOR CONTENT VALIDITY OF THE RESEARCH TOOLS

From

S. SHENPAGAVALLI,
Final Year M.Sc., (N)
Sri Gokulam College of Nursing,
Salem, Tamil Nadu.

To,

Respected Sir/ Madam,

Sub: Requesting opinion and suggestions of experts for establishing content validity of the tools.

I, **S. SHENPAGAVALLI**, a First Year M.Sc., (Nursing) student of Sri Gokulam College of Nursing, Salem. In partial fulfillment of Master's Degree in Nursing, I have selected the topic mentioned below for the research project to be submitted to The Tamil Nadu Dr. M.G.R. Medical University, Chennai.

Topic: "A Study to Evaluate the Effectiveness of Early Suckling on Third Stage of Labour in parturient Women at Selected Hospital, Salem."

I wish to request you kindly validate the tool and give your expert opinion for necessary modification. I will be grateful to you for this.

Thanking you

Yours sincerely,

Place : Salem

Date :

(S. SHENPAGAVALLI)

Enclosed:

1. Tool for collection of data
2. Observation record sheet
3. Criteria checklist of evaluation of tool
4. Certificate of validation

ANNEXURE - D

CERTIFICATE OF VALIDATION

This is to certify that the tool developed by **S. SHENPAGAVALLI**, First year M.Sc. Nursing student of Sri Gokulam College of Nursing, Salem (affiliated to Dr. M.G.R. Medical University) is validated and can proceed with this tool and content for the main study entitled **"A Study to Evaluate the Effectiveness of Early Suckling on Third Stage of Labour in parturient Women at Selected Hospital, Salem.**"

Signature with Date

ANNEXURE - E

LIST OF EXPERTS

1. **Dr. Chellammal, M.D., D.G.O.,**
   Consultant, Obstetricians and Gynecologist,
   Sri Gokulam Hospital, Salem.

2. **Dr. Vijayakumari, MBBS, DGO.,**
   Vijaya Hospital,
   Salem.

3. **Mrs. Thilagavathi, M.Sc(N).,**
   Professor, Department of OBG,
   Shanmuga College of Nursing,
   Salem.

4. **Mrs. Amutha, M.Sc(N).,**
   Associate Professor, Department of OBG,
   Sri Gokulam College of Nursing,
   Salem.

5. **Mrs. R. Nalini, M.Sc (N).,**
   Lecturer, Department of OBG,
   Sri Gokulam College of Nursing,
   Salem.

ANNEXURE – F

CERTIFICATE OF EDITING

TO WHOMSOEVER IT MAY CONCERN

Certified that the dissertation paper titled, **"A Study to Evaluate the Effectiveness of Early Suckling on Third Stage of Labour in parturient Women at Selected Hospital, Salem"** by **Mrs. SHENPAGAVALLI. S, M.Sc (Nursing).** It has been checked for accuracy and correctness of English language usage and that the language used in presenting the paper is lucid, unambiguous free of grammatical or spelling errors and apt for the purpose.

SIGNATURE

WINGS
ENGLISH ACADEMY
1,2,3, IInd Floor Ratha Complex,
Five Roads, SALEM-636 004

ANNEXURE – G

PHOTOS (EARLY SUCKLING)